



Forest Aquatics Team 3rd Annual “Hobo Festival”

District and Forest biologists and hydrologists gathered on Heppner District on April 17, 2002 for the 3rd annual “Hobo Fest”. This annual event marks the beginning of the season for monitoring water temperature across the Forest. Each year, 140 thermographs (water temperature recorders) are deployed in streams across the Forest to record water temperature changes through the year. (Many of the instruments we use are called Hobos, which are made by Onset Corp.)* Water temperature reflects both the seasonal change in net radiation and the daily changes in air temperature. Temperature patterns are also strongly influenced by seasonal changes in stream flow. As streamflow declines, and air temperatures increase, summer water temperatures increase, generally reaching maximum in late July and early August. Temperature controls the rate of biological activity in streams and greatly affects life cycles and behavior of fish and other aquatic life. Extreme high water temperatures in the range of 68-77°F can be lethal to fish.

The annual “Hobo Festival” is a chance for biologists and hydrologists to meet and share the latest methods and techniques for accurately measuring water temperature. This year we traveled to Wilson Creek on Heppner District, and braved typical spring weather (rain, snow, and hail) to practice deployment techniques (placement of instruments) and ways to ensuring accurate recording. Instruments must be placed securely near the bed of the stream in a well-mixed area to ensure representative sampling. At the end of the year we collect the instruments, download the data, and use the results to evaluate stream condition. We can identify streams with high water temperatures and target these areas for restoration. Activities that increase stream shade and reduce solar radiation to the stream channel can help lower water temperatures and improve stream health.

It is vitally important that forest visitors who encounter a small plastic case in a stream leave it in place. Removing the instrument will result in loss of valuable data. For further information on the water monitoring program, contact your District or Forest biologist or hydrologist.

* no endorsement of equipment is implied through use of manufacturer's trade name.